

**California State University, Chico**

**College of Engineering, Computer Science,  
and Construction Management**

**Strategic Plan Update**

**September 2008**

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## **1.0 Introduction**

The College of ECC has made significant progress in its strategic planning due in large measure to an excellent collaborative effort on the part of the ECC Administrative Council. This effort began in Fall 2007 in parallel with the division-wide effort to shape the Academic Plan. However, the majority of the college's planning efforts have taken place during Summer 2008. The college renewed its strategic planning efforts in Fall 2007 by reviewing and actively revising the college Mission and Vision statements. This began with the ECC Administrative Council and filtered down to the department and individual faculty level. Feedback was returned to the Council which helped craft a revised Mission/Vision for the college. A draft Mission/Vision was produced in November 2007 which was again revised during Summer 2008. This revised Mission/Vision appears as Appendix A.

During the summer of 2008 the ECC Council carried out a detailed SWOT (Strengths-Weaknesses-Opportunities-Threats) analysis that carried through several meetings. After refining the items the Council did an independent ranking. Each council member ranked the Strengths, the Weaknesses, the Opportunities, and the Threats from 5 to 1, with 5 being high and 1 low. Scores were totaled for the council members producing a composite ranking. This ranking and subsequent discussion carried through several more meetings of the council, resulting in refinements and revised rankings. The SWOT items as well as the results of the ranking for each category are included in Appendix B. SWOT items were then assigned a priority ranking ("P") for those deemed most critical. Given the timing for this analysis it is not surprising that many high ranking items have a budgetary or resource connection. In addition to the collective rankings an additional column was added to propose a strategic action, in general terms, which could address each of the items. Some of these strategic actions are repeated, because what is sometimes a response to a threat is also an action of opportunity. These actions are subsequently

called the “Strategic Priorities for ECC.” It is noteworthy that this planning effort was carried out independent of the division-wide efforts to craft the Academic Plan.

## **2.0 Alignment of Strategic Priorities with Academic Plan**

To make certain that the outcomes from the ECC planning were synchronous with the Academic Plan, a mapping of the ECC Strategic Priorities to the Academic Plan was carried out. This mapping is included as Appendix C.

The process of mapping the Strategic Priorities to the Academic Plan helped group and consolidate the priorities. For example, the priority to

“Promote unique and distinctive programs. Develop new innovative programs and renovate existing ones to attract the best students and faculty and to better educate the millennium generation. Develop curricular components that emphasize energy, sustainability, and globalization.”

appeared both as a reaction to a Threat and was also seen as an Opportunity. Further, additional items were added to the mapping that were not a direct result of the SWOT analysis, particularly if there was existing activity in the college that clearly aligned with the Academic Plan. For example, the college initiated mandatory advising two years ago which has had a very positive impact on assuring students are making appropriate progress in the major and indirectly improving retention and time to graduation. Despite the extra workload for faculty it has had a positive impact, and appears under heading 1.1 – “Recruit, enroll, retain, and graduate a diverse high quality student population.” The same can be said for the on-going support for the MESA – MEP programs which continue to recruit and retain a diverse student population in the college. Another item which the college considers a hallmark is the on-going support we provide for student co-curricular

activities for our majors. Our student success in these areas is remarkable considering the size of the student body and the limited funding provided for them. This is clearly a value of the college that should be promoted.

Other items that arose from the SWOT analysis were consolidated into single initiatives that are clearly part of the university landscape. For example, the SWOT analysis identified the importance of two perceived strengths:

- The size of the institution is ideal, where students and faculty are treated with a personal touch
- Smaller class sizes in the major which enhances educational experiences

Related issues were raised under the discussion of opportunities:

- The value of the “residential” campus, seen as beautiful, rural, and with a high quality of life for both students and faculty

After examining these issues it became clear that they were all addressed by promoting the “Chico Experience” which either directly or indirectly includes these measures.

### **3.0 Next Steps**

In addition to the basic premise behind the SWOT analysis, and the resulting strategic priorities, the questions that continue to serve as the backdrop for our analysis and discussions are

- How can we use each strength?
- How can we stop each weakness?
- How can we exploit each opportunity?

- How can we defend against each threat?

These questions, together with the stated Strategic Priorities, will help frame our planning as we continue to develop meaningful, measurable action plans that unfold from the current framework. Further, these same questions need to be posed at the department level – to help frame their discussions and planning.

While the strategic priorities that appear on the mapping are still quite general, the next steps include developing specific actions and timelines for the highest priority items. Along with these will be corresponding sets of outcomes and measurements. The short-term goal for this planning is to have a draft set of actions, timelines, and measurements by the beginning of Spring semester 2009.

The college has made great progress in its planning efforts in a short period of time, due to the good collaboration of the ECC Administrative Council and their excellent participation.

## **Appendix A**

### **College Mission / Vision**

## ***OUR MISSION***

We prepare students for successful professional careers in applied science, engineering, and technology. We educate them to be successful leaders and innovators capable of meeting complex challenges.

### *Shaping the Mission through our values*

- We teach, mentor, motivate, and challenge students
- We foster rich learning environments
- We advance scholarship and creativity
- We encourage industry engagement and collaboration
- We promote teamwork through projects and co-curricular activities
- We value graduate education and life-long learning
- We create a new generation of problem solvers for a sustainable future

## ***OUR VISION***

### *We will*

- be known for providing supportive learning environments
- be known for our focus on student success
- be known for our commitment to community service
- be known for our commitment to high quality technical education throughout the North State and beyond
- be known for embracing the scholarship of applied sustainable practices
- be committed to continuous improvement
- be the programs of choice for our students and their employers

## **Appendix B**

### **SWOT Analysis and Rankings**

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### Strengths

Ranking	Strengths (INTERNAL)		Strategic Action to Address
25	Work ethic of students, faculty, staff and administrators; extremely committed.	P	Reward commitment of students, faculty, staff and administrators who contribute to the success of the college and its programs
11	friendly, supportive environment/caring attitude toward students; accessible faculty		Promote collegial environment and both curricular and co-curricular involvement of faculty, staff, and students
32	Value and Quality of education	P	Promote college programs to prospective students - emphasizing educational value
5	Size of institution is ideal; personal touch yet not too small.		Promote the "Chico Experience" including campus beauty, nurturing educational environment, and quality of life for prospective students and faculty
4	Smaller class size which allows unparalleled educational opportunities.		Promote the "Chico Experience" including campus beauty, nurturing educational environment, and quality of life for prospective students and faculty
7	Industry centric; Industry-friendly institution.		Encourage partnerships with industry and the professions
21	Demand for our graduates due to hands-on practical curriculum.	P	Promote college programs to employers - emphasizing practice-oriented curricula and associated student activities
15	Student co-curricular involvement and success	P	Actively support student co-curricular activities and reward their achievements
	✓ Intercollegiate competitions.		

Note: P = Higher Priority Item

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**Weaknesses**

Ranking	Weaknesses (INTERNAL)		Strategic Action to Address	
8	Lack of depth (numbers) in faculty and staff		Conscious, strategic hiring of faculty with cross-over capability	1
16	Aging cohort of baby boomer faculty who will retire in large numbers over the next 5-10 years.	P	Actively recruit new cohort of tenure-track faculty and full-time lecturers to replace aging faculty	1
3	Lack of affinity with alumni		Increase alumni outreach and development activities	1
5	Resistance to change		Promote unique and distinctive programs. Develop new innovative programs and renovate existing ones to attract the best students and faculty and to better educate the millennium generation	1
6	Failure to maintain currency of certain courses / curriculum		Develop new innovative programs and renovate existing ones to attract the best students and faculty and to better educate the millennium generation	1
16	Faculty scholarship low & staff training low. Professional development is non-existent.	P	Develop resources to support faculty and staff development and encourage faculty scholarship	1
16	Lab equipment maintenance is adversely impacted by limited technical staff	P	Develop additional resources to support additional technical support staff	1
12	Poor record of holding employees accountable.		Improve utilization of existing accountability measures for faculty and staff	1
	✓ EVALUATION of tenured faculty			
	✓ Too timid on RTP expectations			
	✓ Too timid on staff evaluations			
4	Failure to share existing resources		Improve utilization and sharing of existing resources across the college	1
	✓ labs			
	✓ courses			
	✓ equipment			
25	Limited Capital Resources (both Quality and Quantity); facilities and equipment	P	Seek and develop corporate sponsorship of curriculum, laboratory equipment and enhanced student learning opportunities	2
9	Limited classroom facilities: more flexible learning, contemporary learning spaces are needed		Develop innovative and flexible facilities to improve environment for student learning and teaching	2

Note: P = Higher Priority Item

Broad categories: 1) human resources; 2) capital resources

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### Opportunities

Ranking	Opportunities (EXTERNAL)		Strategic Action to Address
19	"Residential" campus	P	Promote the "Chico Experience" including campus beauty, nurturing educational environment, and quality of life for prospective students and faculty
	✓ Beautiful & rural.		
	✓ Quality of life (e.g. safety, natural resources, low traffic).		
19	We are producing technical workforce for California and beyond	P	Promote college contributions to regional, state, national and international technical workforce
17	Corporate sponsorship of equipment and curricula	P	Develop additional resources to improve existing classroom and laboratory facilities as well as space for co-curricular activities and student / faculty research
14	Need for growth in sponsored projects; more projects, more faculty participants		Encourage faculty participation in sponsored research and professional practice through RTP processes and supplemental resources
11	Pursue professional development for industry (e.g. CP2C model)		Develop strategic partnerships with industry to provide technical education and training opportunities for practicing professionals
13	Create new innovative programs and adapt existing ones to changing environment, customers, etc.		Promote unique and distinctive programs. Develop new innovative programs and renovate existing ones to attract the best students and faculty and to better educate the millennium generation. Develop curricular components that emphasize energy, sustainability, and globalization
15	Hire more FT lecturers with job security and full-time expectations		Recruit and retrain a high-quality cohort of dedicated full-time lecturers with professional experience
11	Raise University eligibility level - balance higher standards for admission with access.		Seek to achieve balance between quality of incoming student population with access to higher education
1	Online/distance education. Continuing education for intellectual enrichment and for people of all ages. Online opportunities nationally and globally.		Will compare on-line opportunities where appropriate

Note: P = Higher Priority Item

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### Threats

Ranking	Threats (EXTERNAL)		Strategic Action to Address	
34	Dependence on State funding and its associated uncertainty	P	Increase development of external resources to reduce dependence on shrinking state resources	1
20	Resources for facilities (limited space for growth)	P	Develop additional resources to improve existing classroom and laboratory facilities as well as space for co-curricular activities and student / faculty research	1
7	Poor facility maintenance threatens image		Work with facility maintenance personnel to improve facility image and its maintenance	1
4	Recognition and support (our \$ cut) for existing graduate programs		Recognize contributions of graduate programs to international programs and globalization, and associated resource needs	1
27	Continually increasing workload - does not allow for scholarship / balance / mental health	P	Protect faculty workload: 1) develop additional funding for faculty scholarship, 2) develop additional funding for student assistants, 3) develop additional funding for technical support staff	1
2	Changing demographics with need for changing learning and teaching paradigms			2
7	Competition for best students / need for more scholarships		Continue to seek external funding for program and college recruitment scholarships	2
2	Remote location (from technical organizations).			2
1	On-going emergence of non-traditional, for-profit suppliers of services.	P	Promote unique and distinctive programs. Develop new innovative programs and renovate existing ones to attract the best students and faculty and to better educate the millennium generation. Develop curricular components that emphasize energy, sustainability, and globalization	2
18	Competition for qualified teaching candidates due to competitive offers elsewhere.	P	Actively recruit new cohort of tenure-track faculty and full-time lecturers to replace aging faculty. Work to recruit more qualified female faculty.	2

Note: P = Higher Priority Item

Broad Categories: 1) State Resources 2) Competition

## **Appendix C**

### **Academic Plan Mapping**

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<b>Academic Plan 2007 - 2012</b>	<b>Performance Domain</b>	<b>Higher Priority</b>	<b>College of ECC Strategic Priorities 2007-2012</b>
<b>1.0 <i>Enhance student learning—both inside and outside the classroom</i></b>			
1.1 Recruit, enroll, retain, and graduate a diverse high quality student population	Student Population		
	Diversity of Student Population		Continue to support MESA recruitment and retention activities
	Student Recruitment		Continue to seek external funding for program and college recruitment scholarships
		*	Promote the "Chico Experience" including campus beauty, nurturing educational environment, and quality of life for prospective students
		*	Promote college programs to prospective students - emphasizing educational value
	Quality of Students Recruited		Seek to achieve balance between quality of incoming student population with access to higher education
	Student Retention		Continue college-wide mandatory advising
	Student Graduation		Continue college-wide mandatory advising
1.2 Offer excellent and distinctive programs	Academic Programs	*	Maintain accreditation status for accredited programs
	Program Environment		Develop innovative and flexible facilities to improve environment for student learning and teaching
	Student Experiences		Promote collegial environment and both curricular and co-curricular involvement of faculty, staff, and students
	Student Perceptions		Work with facility maintenance personnel to improve facility image and its maintenance

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	<b>Academic Plan 2007 - 2012</b>	<b>Performance Domain</b>	<b>Higher Priority</b>	<b>College of ECC Strategic Priorities 2007-2012</b>
1.3	Deliver active, collaborative and transformative pedagogies	Pedagogy	*	Promote unique and distinctive programs. Develop new innovative programs and renovate existing ones to attract the best students and faculty and to better educate the millennium generation
1.4	Support Student Participation in regional, national and international learning opportunities	Student Participation Rates	*	Actively support student co-curricular activities and reward their achievements
1.5	Ensure access to the most effective information and learning resources	Library / Information Resources  Access to Learning- Enabling Resources  Use of learning management systems		
1.6	Maintain superior student support systems	Summer Orientation  Remediation First-Time Freshman Success Advising  Career Planning and Placement		
1.7	Demonstrate educational effectiveness	Program Effectiveness	*	Maintain accreditation status for accredited programs  Continue to promote nationally recognized professional licensure and certificates, and recognize corresponding student success
<b>2.0</b>	<b><i>Nurture excellence in faculty and staff resources</i></b>			
2.1	Recruit, develop, and retain diverse, excellent faculty and staff	Faculty and Staff Headcount	*	Actively recruit new cohort of tenure-track faculty and full-time lecturers to replace aging faculty
			*	Promote the "Chico Experience" including campus beauty, nurturing educational environment, and quality of life for prospective faculty

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<b>Academic Plan 2007 - 2012</b>	<b>Performance Domain</b>	<b>Higher Priority</b>	<b>College of ECC Strategic Priorities 2007-2012</b>
	Diversity of Faculty and Staff		Work to recruit more qualified female faculty
	Recruitment		Conscious, strategic hiring of faculty with cross-over capability  Recruit and retrain a high-quality cohort of dedicated full-time lecturers with professional experience
	Retention	*	Protect faculty workload: 1) develop additional funding for faculty scholarship, 2) develop additional funding for student assistants, 3) develop additional funding for technical support staff  Develop additional resources to support additional technical support staff
2.2	Strengthen and integrate teaching, scholarship, student learning and public service	Teacher / Scholar	
2.3	Support professional growth and achievement	Development of Faculty	Encourage faculty participation in sponsored research and professional practice through RTP processes and supplemental resources
		Development of Staff	
2.4	Recognize, value and celebrate outstanding performance	Recognition	*
			Reward commitment of students, faculty, staff and administrators who contribute to the success of the college and its programs
<b>3.0 <i>Educate for a sustainable global society</i></b>			
3.1	Deliver curricular and extra-curricular programs for sustainability	Curricular Programs	Develop curricular components that emphasize energy, sustainability, and globalization
		Extra-Curricular Programs	
3.2	Promote scholarly and creative activities in sustainability	Scholarship	Support faculty research and scholarship in the areas of energy, sustainability, and globalization
		Grants and Contracts	Encourage faculty to seek funded research in the areas of energy, sustainability, and globalization

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<b>Academic Plan 2007 - 2012</b>	<b>Performance Domain</b>	<b>Higher Priority</b>	<b>College of ECC Strategic Priorities 2007-2012</b>
3.3	Provide regional leadership for sustainable development practices		
3.4	Assist the University to serve as a model sustainable campus		
<b>4.0 <i>Serve the North State and beyond</i></b>			
4.1	Address diverse educational needs	Educational Impact	* Promote college contributions to regional, state, national and international technical workforce (We are producing technical workforce for California and beyond)
4.2	Stimulate sustainable economic development	Economic Impact	* Promote college programs to employers - emphasizing practice-oriented curricula and associated student activities  Develop strategic partnerships with industry to provide technical education and training opportunities for practicing professionals
4.3	Support a rich cultural and artistic environment	Cultural / Artistic Impact	
4.4	Collaborate through mutually beneficial public engagement initiatives		
<b>5.0 <i>Strategically manage resources in support of mission, vision and goals</i></b>			
5.1	Marshal resources to achieve mission, vision and goals	State Appropriations	* Increase development of external resources to reduce dependence on shrinking state resources  Recognize contributions of graduate programs to international programs and globalization, and associated resource needs
		Grants and Contracts Funded	* Develop resources to encourage faculty scholarship  Develop additional resources to support additional technical support staff
		Advancement	* Develop resources to support faculty and staff development

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<b>Academic Plan 2007 - 2012</b>	<b>Performance Domain</b>	<b>Higher Priority</b>	<b>College of ECC Strategic Priorities 2007-2012</b>
			Increase alumni outreach and development activities
		*	Develop additional resources to improve existing classroom and laboratory facilities as well as space for co-curricular activities and student / faculty research
5.2 Align all resources to achieve mission, vision and goals	Funding by Goals		
5.3 Foster a culture of evidence-based planning and decision making across all units	Evidence-based planning , decision making and evaluation		
5.4 Demonstrate organizational effectiveness	Effectiveness		Improve utilization of existing accountability measures for faculty and staff
	Access to Administrative Systems		
	Access to Knowledge Management Systems		